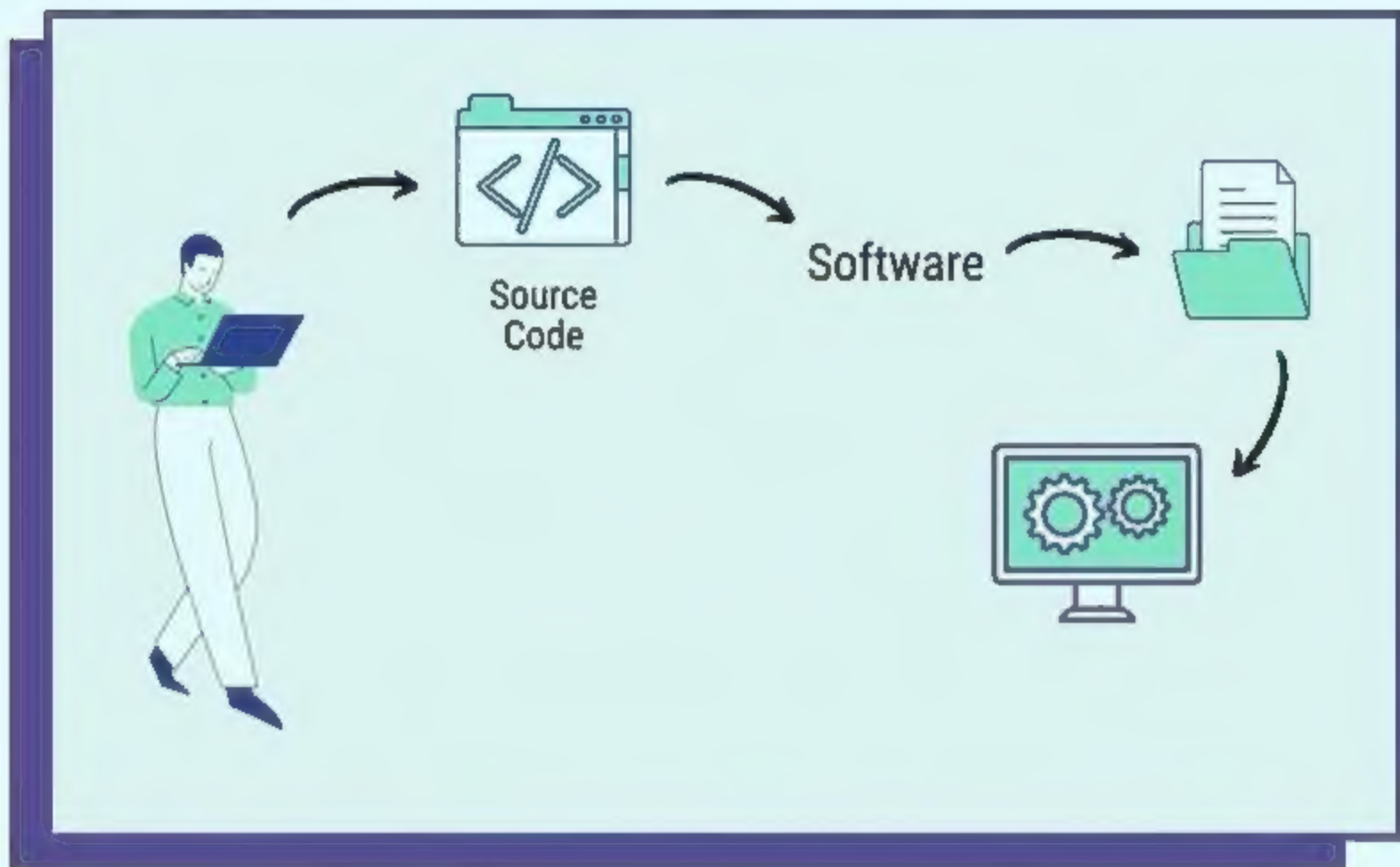




PROGRAMMING BASICS

WHAT IS PROGRAMMING?

Programming is the process of giving computers instructions on how to act. These instructions are known as code, and programmers use code to complete certain tasks.



There are five basic concepts to any programming language:

VARIABLES

CONDITIONAL STATEMENTS

LOOPING & ITERATION

DATA TYPES & STRUCTURES

FUNCTIONS

VARIABLES

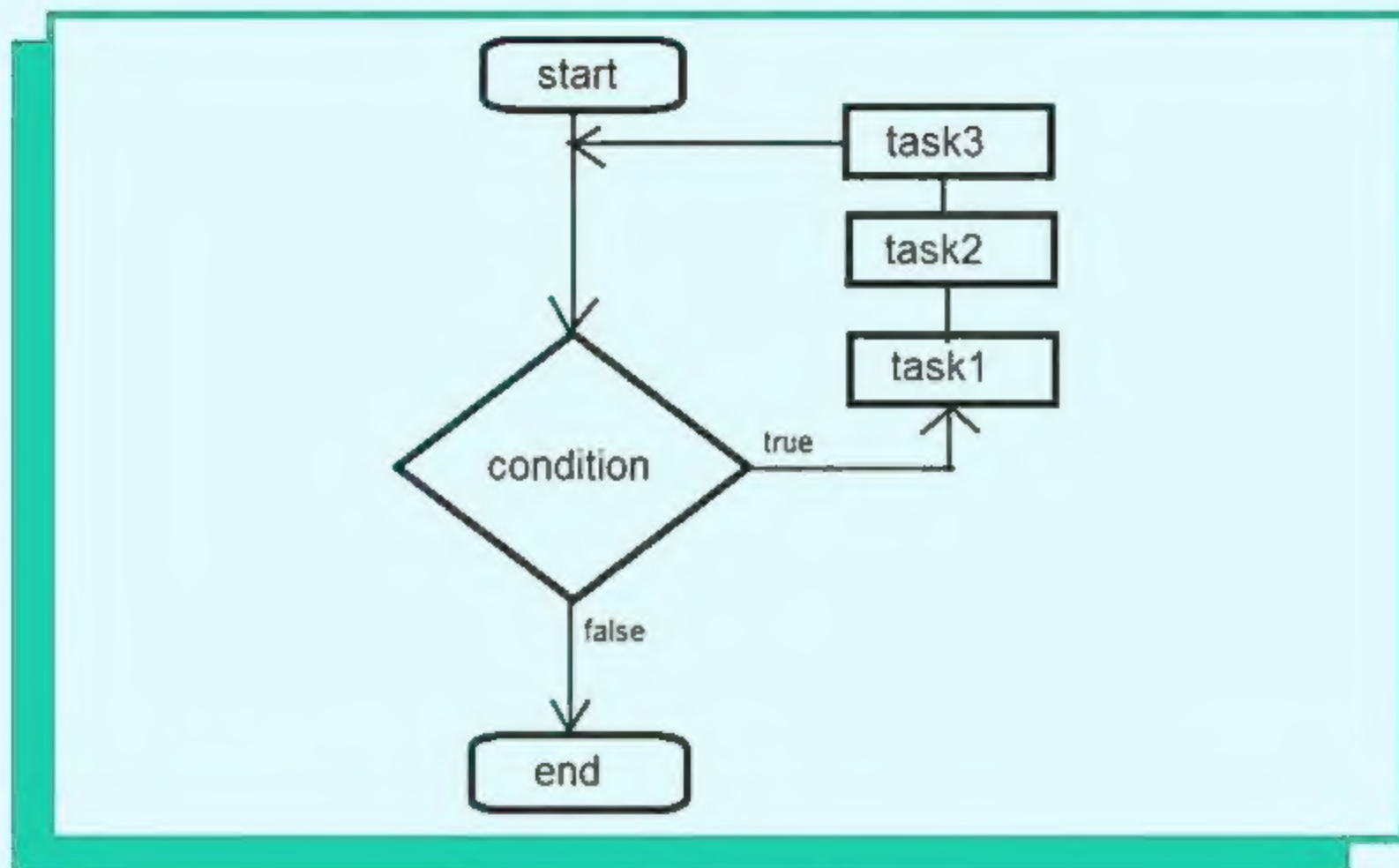
Variables are symbolic “envelopes” used to store and reference information; variables can have many properties like a name, type, value, scope, lifetime, and location.

```
<interceptors>
  <interceptor-stack name="defaultWithoutUpload">
    <interceptor-ref name="exception"/>
    <interceptor-ref name="alias"/>
    <interceptor-ref name="servletConfig"/>
    <interceptor-ref name="i18n"/>
    <interceptor-ref name="prepare"/>
    <interceptor-ref name="chain"/>
    <interceptor-ref name="scopedModelDriven"/>
    <interceptor-ref name="modelDriven"/>
    <interceptor-ref name="checkbox"/>
    <interceptor-ref name="datetime"/>
    <interceptor-ref name="multiselect"/>
    <interceptor-ref name="staticParams"/>
    <interceptor-ref name="actionMappingParams"/>
    <interceptor-ref name="params"/>
  </interceptor-stack>
</interceptors>
```

Smith Collection/Gladys / Getty Images

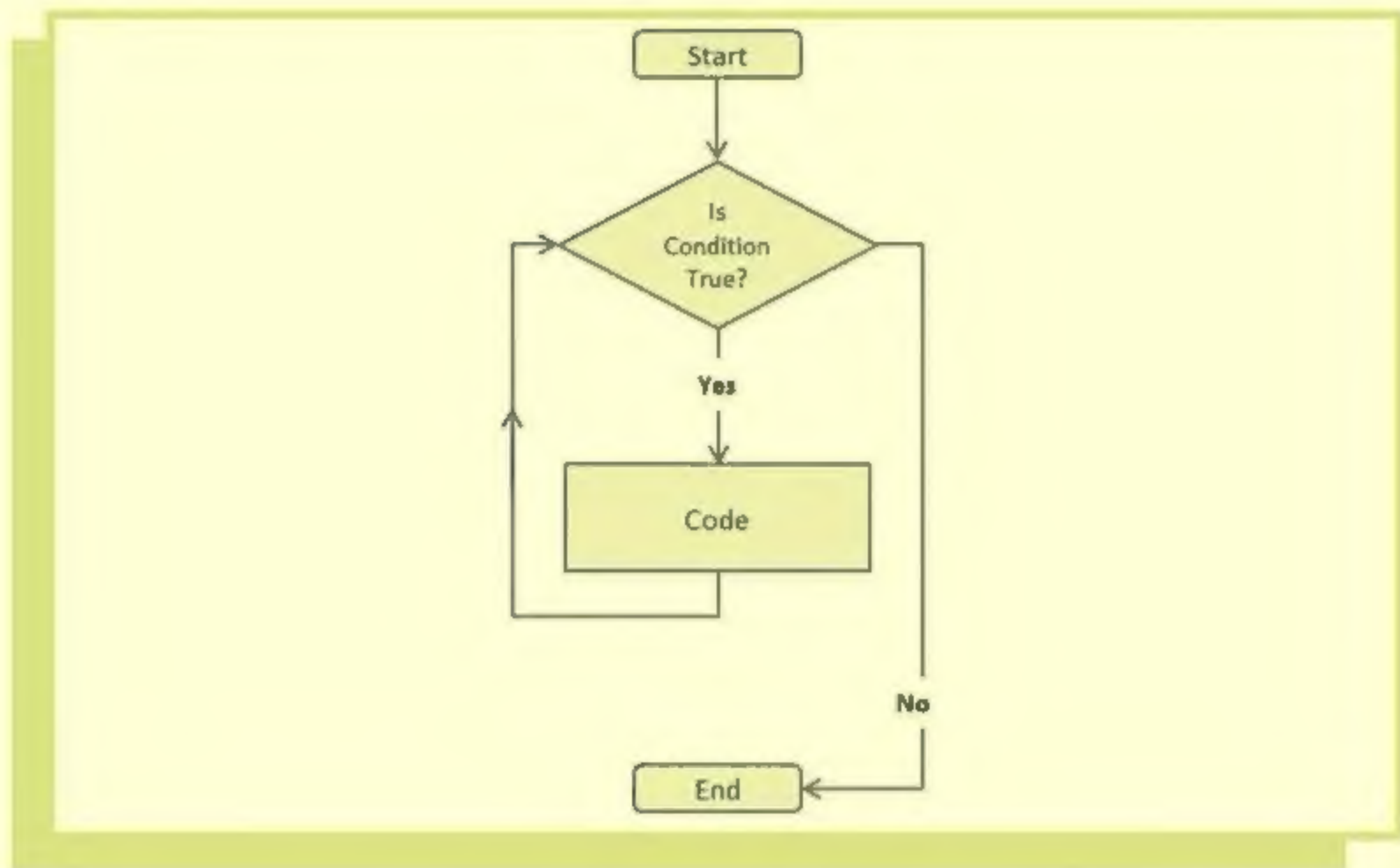
CONDITIONAL STATEMENTS

Also known as “if” statements, these are expressions that determine if a variable is true or false; the action that the program carries out based on the true/false answer is the condition.



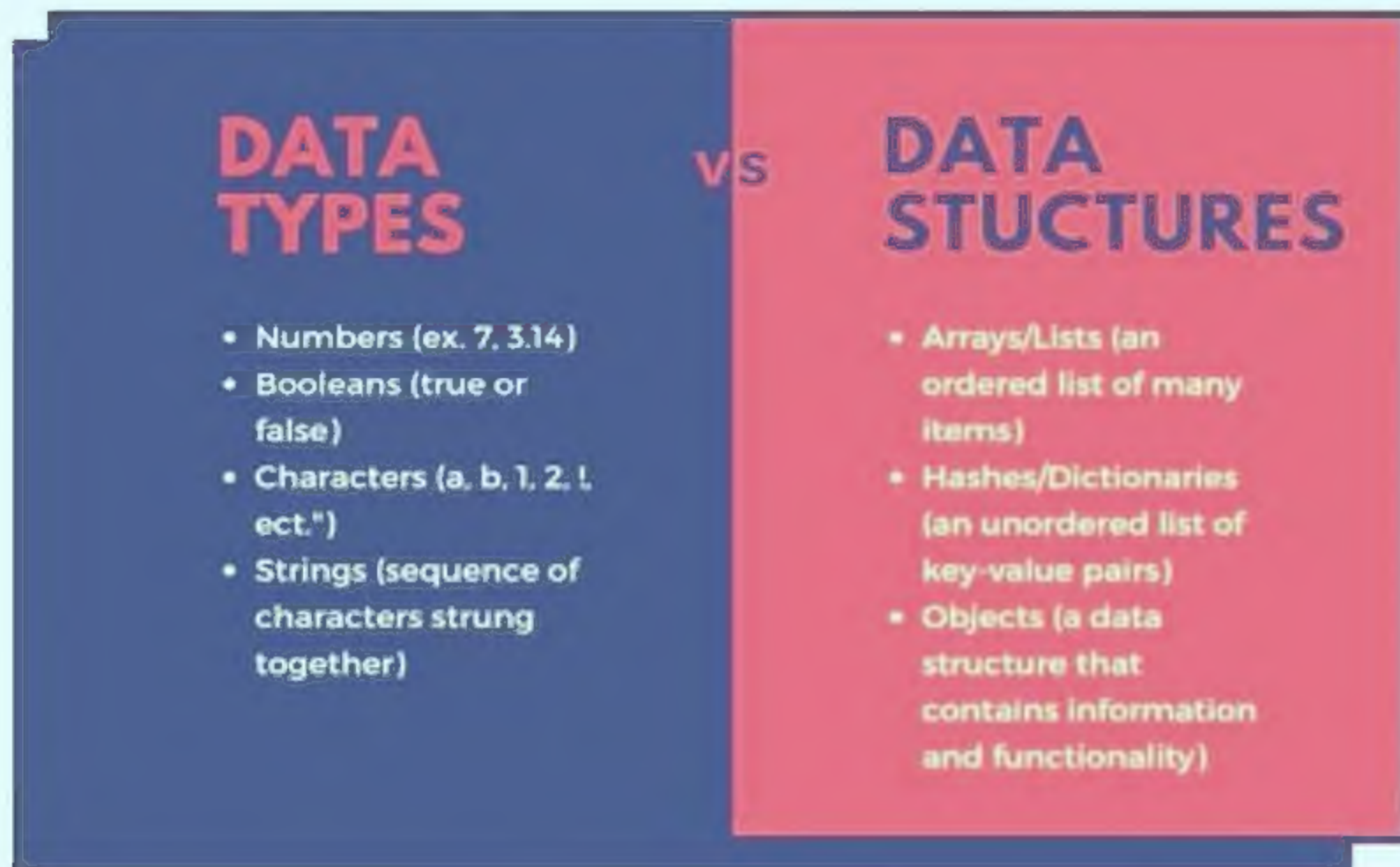
ITERATION & LOOPING

If a program repeats a sequence or process, that is an iteration. Loops are a type of iteration, where a program carries out an action until a new condition is met.



DATA TYPES & STRUCTURES

Data types help categorize the information of a variable; data structures are data types that arrange data in a specific way.



FUNCTIONS

A function is a contained block of code that can perform an action. Functions can be used multiple times and allow you to reuse code instead of continuously rewrite it.

